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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,134	03/29/2004	Rebecca Wright	3086.EEM	3212

7590 09/18/2006

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EXAMINER

BERMAN, SUSAN W

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 09/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/812,134

Applicant(s)

WRIGHT ET AL.

Examiner

Susan W. Berman

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-23 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

Response to Amendment

The rejection of claims 1-22 under 35 U.S.C. 112, second paragraph, is withdrawn in response to the amended claims.

The rejection of claims under 35 U.S.C. 102(e) as being anticipated by Van Den Berg et al (6,987,135) is withdrawn because Van Den Berg et al do not teach adding a silicone resin emulsion.

The rejection of claims under 35 U.S.C. 102(e) as being anticipated by Weikard et al (6,960,639) is withdrawn because Weikard et al do not teach adding a silicone resin emulsion.

Response to Arguments

Applicant's arguments filed 06-20-2006 have been fully considered but they are not persuasive.

WO 03/053728: Applicant alleges that the silicone emulsion polymers disclosed by WO '728 do not provide the beneficial properties of the silicone resin emulsions of the instant invention. This argument is unpersuasive because there is no comparative data of record to support the allegation. Applicant states that the silicone polymer emulsions disclosed by WO '728 have a significantly lower molecular weight than the silicone emulsion of the instant invention. This argument is not persuasive because the molecular weight of the silicone emulsion is not recited in the claims and because there is no evidence to show that the molecular weight of the silicone emulsions taught by WO '728 are significantly lower.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is

Art Unit: 1711

not clear what is meant by an “appearance coating”. The examiner has not found any evidence to support the allegation that “appearance coating” is a phrase that has a meaning that is well known in the art. The phrase is not defined in the instant specification. The phrase “comprising the coating of claim 1” should be rewritten “comprising a coating obtained by curing the compositions of claim 1 by exposure to ultraviolet light”. Claim 1 now recites a composition, not a coating.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 2, 4-9, 15, 16, and 18-23 are rejected under 35 U.S.C. 102(a) as being anticipated by WO 03/053728. WO ‘728 discloses coating compositions comprising water-borne “PUD” resins, a photoinitiator and wetting agents in the Examples. The wetting agents taught include silicone polymers in emulsion form, i.e. silicone polyester acrylate Tegorad 2200N and Polyether siloxane copolymer Tegoglide 450. See page 2, line 14, to page 3, line 13. With respect to claim 2, WO ‘728 teaches that Irgacure 2959, one of the oligomeric photoinitiators specifically disclosed by applicant on page 5, line 9, of the specification, is a preferred photoinitiator. With respect to claims 5-9, although WO ‘728 does not specifically teach the ranges of weight percent set forth, the compositions taught by WO ‘728 comprise the recited components in weight percents within the instantly claimed ranges. With respect to claims 18-20, the properties set forth in the claims are considered to be inherent properties of the compositions disclosed by WO ‘728 because the same components as are set forth in the claims are taught.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 2, 3 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 03/053728, as applied to claims 1, 2, 4-9, 15, 16, and 18-23 above, and further in view of Weikard et al (6,960,639). The disclosure of WO '728 is discussed above. Weikard et al disclose aqueous coating compositions based on polyurethane dispersions and a photoinitiator. Table 2 discloses compositions comprising a wax and a BYK leveling additive. Weikard et al teach that the preferred photoinitiators are those easy to incorporate into aqueous coating compositions. The disclosed preferred photoinitiators are alpha-hydroxyalkylphenones, such as Irgacure 500 and Esacure KIP photoinitiators (column 14, lines 54-59). Light stabilizers, UV absorbers, wetting agents and dispersions are taught in column 15, lines 27-40. Wax dispersing agent is used in the examples (see Table 2).

With respect to claim 2, It would have been obvious to one skilled in the art at the time of the invention to substitute the preferred photoinitiators taught by Weikard et al for the preferred photoinitiator taught by WO '728. Motivation is provided by the teaching of Weikard et al that photoinitiators easily incorporated into aqueous coating compositions are preferred for use in the polyurethane emulsions.

With respect to claims 3 and 11-12, WO '728 does not mention adding a UV stabilizer, a UV absorber, a wax or a nylon. However, Weikard et al teach adding light stabilizers and wax dispersing agent. It would have been obvious to one skilled in the art at the time of the invention to employ light stabilizers and a wax dispersing agent, as taught by Weikard et al in analogous aqueous polyurethane emulsions, in the compositions disclosed by WO '728. One of ordinary skill in the art at the time of the invention would have been motivated by a reasonable expectation of providing light stabilization to the cured coating and improving dispersion in the aqueous dispersions, as taught by Weikard et al.

Claims 10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 03/053728, as applied to claims 1, 2, 4-9, 15, 16, and 18-23 above, and further in view of Griswold et al (5,525,427). WO '728 teaches silicone wetting agents but does not mention methylmethoxypolysiloxane. Griswold et al teach a water reducible weatherstrip coating compositions comprising a silicone emulsion, a bath life extender, such as a polyurethane dispersion, and a crosslinking composition. See column 5, lines 29-47, and column 7, lines 43-60. Methylmethoxypolysiloxane is taught as a water reducible resin acting as a bath life extender and water repellant.

With respect to claim 10, it would have been obvious to one skilled in the art at the time of the invention to determine the optimum weight percent of silicone emulsion to employ in the compositions suggested by the teachings of WO '728 alone or the teachings of WO '728 and Griswold et al in combination. With respect to claim 17, It would have been obvious to one skilled in the art to employ a polysiloxane having a methoxy group, as taught by Griswold et al, as the silicone wetting agent in the compositions disclosed by WO '728 in order to take advantage of its function as a bath life extender and a water repellant, taught by Griswold et al.

Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 03/053728, as applied to claims 1, 2, 4-9, 15, 16, and 18-23 above, and further in view of Van Den Berg et al (6,987,135). The disclosure of WO '728 is discussed above. Van Den Berg et al disclose photoactivatable water borne coating compositions comprising a polyurethane dispersion and a photoinitiator. Table 8 discloses a compositions comprising KIP 100F as photoinitiator, a BYK defoamer, BYK leveler and a polyamide wax orgasol each in amounts encompassed by the instant claims. WO '728 does not teach polyamide additives. However, It would have been obvious to one skilled in the art at the time of the invention to employ a polyamide wax orgasol, as taught by Van Den Berg et al in analogous aqueous

Art Unit: 1711

polyurethane dispersions, in the aqueous polyurethane dispersions taught by WO '728. One of ordinary skill in the art at the time of the invention would have been motivated by a reasonable expectation that the polyamide additives would function advantageously in the dispersions disclosed by WO "728.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

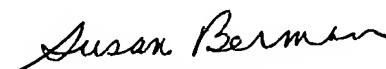
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan W. Berman whose telephone number is 571 272 1067. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571 272 1078. The fax phone number for the organization where this application or proceeding is assigned is 571 273-8300.

Art Unit: 1711

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SB
9/1/2006



Susan W Berman
Primary Examiner
Art Unit 1711